



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,466	12/15/2003	Allan Wesley Rosenbalm	16230-US	3465

7590 07/06/2004

Jimme R. Oaks
Patent Department
DEERE & COMPANY
One John Deere Place
Moline, IL 61265-8098

EXAMINER

TORRES, ALICIA M

ART UNIT	PAPER NUMBER
----------	--------------

3671

DATE MAILED: 07/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/736,466

Applicant(s)

ROSENBALM ET AL.

Examiner

Alicia M Torres

Art Unit

3671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 14-16 is/are rejected.
- 7) ☒ Claim(s) 10-13 and 17-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/15/03.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered. U.S. Patent no. 5,964,069 has not been listed in a form PTO-892.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a) because they fail to show crop conditioner arrangement "25" as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the

Art Unit: 3671

changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claim 6 is objected to because of the following informalities: the word "sat" in line 5 should be changed to -said—. Appropriate correction is required.

DETAILED ACTION

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 2, 4, 7-9 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenbalm et al., hereafter Rosenbalm, as cited by applicant, in view of Scarnato et al., hereafter Scarnato.

6. In regards to claims 1, 2, 4, 7-9 Rosenbalm discloses in combination with a mowing implement including a rotary disc cutter bar (30) extending transversely to a direction of travel during mowing operation and including transversely spaced, knife-carrying rotary discs (40, 42, 44), structure (108, 110, 112) aiding in converging cut crop toward a discharge zone located behind the cutter (30), comprising: at least one converging drum (108) mounted having an

Art Unit: 3671

upright axis of rotation located behind a line of centers of said cutter bar (30) and being located upstream relative to crop movement toward said discharge zone and adjacent at least one of said rotary discs (40);

and said at least one converging drum (108) having a lower end (114) including an outer peripheral edge located a first distance above a path followed by knife blades carried by said at least one of said rotary discs (40), as per claim 1; and

wherein said at least one of said rotary discs (40) is an end rotary disc, as per claim 4;

wherein said surface of said at least one converging drum (108) is conical, as per claim 8;

and

wherein said structure aiding in the delivery of crop includes at least a second converging drum (110), identical to said at least one converging drum (108), mounted for rotation about a second upright axis located behind and downstream from said upright axis of rotation of said at least one converging drum (108), as per claim 9.

However, Rosenbalm fails to disclose an inner region surrounding said upright axis and located a second distance, which is greater than said first distance, above said path, thereby creating a relief area beneath said at least one converging drum, as per claim 1; and

wherein said lower end of said at least one converging drum includes a top surface which is inclined upwardly and inwardly toward said upright axis of rotation of the converging drum, whereby crop engaging said lower end is lifted, as per claim 2; and

wherein said lower end of said at least one converging drum is in the shape of an inverted bowl, as per claim 7.

Art Unit: 3671

Scarnato discloses a harvesting machine including a rotor with an inner region (180) surrounding said upright axis and located a second distance, which is greater than said first distance, above said path, thereby creating a relief area, as per claim 1; and

wherein said lower end of said at least one converging drum includes a top surface (180) which is inclined upwardly and inwardly toward said upright axis of rotation, whereby crop engaging said lower end is lifted, as per claim 2; and

wherein said lower end of the rotor (156) is in the shape of an inverted bowl, as per claim 7.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the crop receiving area of Scarnato on the device of Rosenbalm in order to accommodate mowed material.

7. In regards to claim 14, Rosenbalm discloses in combination with a mowing implement including a rotary disc cutter bar (30) extending transversely to a direction of travel during mowing operation and including transversely spaced, knife-carrying rotary discs (40, 42, 44), structure (108, 110, 112) aiding in converging cut crop toward a discharge zone located behind the cutter (30), comprising: at least one converging drum (108) mounted having an upright axis of rotation located behind a line of centers of said cutter bar (30) and being located upstream relative to crop movement toward said discharge zone and adjacent at least one of said rotary discs (40, 42, 44), as per claim 14.

Art Unit: 3671

However, Rosenbalm fails to disclose wherein said at least one converging drum has a lower end including an upper surface inclined upwardly toward said upright axis, as per claim 14.

Scarnato discloses a harvesting machine including a rotor (156) having a lower end including an upper surface (180) inclined upwardly toward the upright axis, as per claim 14.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the crop receiving area of Scarnato on the device of Rosenbalm in order to accommodate mowed material.

8. Claims 3, 5, 6, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenbalm and Scarnato as applied to claim 1 above, and further in view of O'Halloran et al, hereafter O'Halloran.

The device is disclosed as applied to claim 1 above. However, the combination fails to disclose wherein said structure aiding in converging cut crop includes a flat ejector plate mounted to a top of, and for rotation with, said at least one rotary disc; and said flat ejector plate being dimensioned so as to sweep a path beneath said at least one converging drum, as per claims 3 and 15; and

wherein said structure aiding in converging cut crop further includes a second converging drum mounted to a top of, and for rotation with, said second rotary disc, as per claim 5; and

wherein said at least one converging drum is located adjacent to a second rotary disc; and a second flat ejector plate being mounted to a top of, and for rotation with said second rotary

Art Unit: 3671

disc; and said second flat ejector plate being dimensioned for sweeping a path beneath said at least one converging drum, as per claims 6 and 16.

O'Halloran discloses a similar device wherein said structure aiding in converging cut crop includes a flat ejector plate (98) mounted to a top of, and for rotation with, said at least one rotary disc (32); and said flat ejector plate (98) being dimensioned so as to sweep a path beneath said at least one converging drum (46), as per claims 3 and 15; and

wherein said structure aiding in converging cut crop further includes a second converging drum (46) mounted to a top of, and for rotation with, said end rotary disc (32a), as per claim 5; and

wherein said at least one converging drum (46) is located adjacent to a second rotary disc (32b); and a second flat ejector plate (98) being mounted to a top of, and for rotation with said second rotary disc (32b); and said second flat ejector plate (98) being dimensioned for sweeping a path beneath said at least one converging drum (46), as per claims 6 and 16.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the ejector plate of O'Halloran on the device of Rosenbalm and Scarnato in order to assist in delivery of crop material.

Allowable Subject Matter

9. Claims 10-13 and 17-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Richardson et al., Pruitt et al., and Steifvater et al. have been cited as of interest.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia M. Torres whose telephone number is 703-305-6953. The examiner can normally be reached Monday through Thursday from 7:00 a.m. – 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached at 703-308-3870.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is 703-305-1113. The fax number for this Group is 703-872-9306.



Thomas B. Will
Supervisory Patent Examiner
Group Art Unit 3671

AMT
June 25, 2004